

device **1250** which uses a sphere-type inductive coupling device for induction instead of a conventional plate-type inductive coupling device. Preferably, electric vehicle **1200** includes ancillary or backup electrical generation devices. Such ancillary or backup electrical generation devices may convert mechanical motion associated with the electric vehicle **1200** into electricity. For example, when you open the door, a magnetic rod travels through a series of windings which produces electrical current. In addition, the regenerative braking system **1210** described above is another example of an ancillary or backup electrical generation device. Further, electric vehicle **1200** may be provided with a hydrogen motor **1260** that generates electricity. Electric vehicle **1200** may further include channels to collect rain water stored and used by hydrogen motor **1260**. Still further, electric vehicle **1200** may be provided with photonic harvesting material underneath the chassis to allow for the conversion into electricity of photonic energy received from light sources that are coupled to solar energy harvesting strip **110**. The light sources may be embedded in the driving service **120** and/or solar energy harvesting strip **110**. While electric vehicle **1200** may include all of the above features, electric vehicle **1200** may alternatively include any combination of any number of the above features as well as other features that increase its efficiency.

[0119] A conventional plate-type inductive coupling device is illustrated in FIG. 13. In operation, the conventional plate-type inductive coupling device uses flat metal plates **1310** that must be lowered from a raised position **1330** to a lowered position **1340** so as to be placed in the field **1350** of charging medium **1320** in order to cause current flow across the surface of the plates **1310**. This configuration has a number of disadvantages, including potential damage to the plates due to snow, ice, debris or the like. This configuration is further problematic in that the plates **1310** must be centered over the charging medium **1320** for maximum inductive coupling.

[0120] A sphere-type inductive coupling device **1250** according to an exemplary embodiment is shown in FIG. 14. The inductive coupling device **1250** includes an inductance sphere **1410** that does not need to be raised or lowered and so may be fixed at a permanent height well above the charging medium. A sphere-type inductive coupling device is beneficial in that it has a far greater surface area than a plate-type inductive coupling device. The inductance sphere **1410** may be made of a great range of materials including any, or any combination of, soft or hard magnetic materials, dielectric materials and electro-conductive materials. Further, any type of motor, including a hydrogen motor or small internal combustion engine, may be used to spin the inductance sphere **1410** for the generation of electrical energy. When the inductance sphere **1410** is spun in the field **1420** over the solar energy harvesting strip **110**, the inductance sphere **1410** accumulates a charge on its surface which in turn is transferred to the battery/storage area **1450**. The inductance sphere **1410** accumulates a charge on its surface by inductance through the coil of conductors **1440** around its center. Thus, if the battery storage areas **1450** are low in charge and the vehicle is not moving, the inductance sphere **1410** may be spun to charge its batteries.

[0121] The use of multiple spheres of the same size or of different sizes results in the ability to multiply the charge effect over a large area no matter what the vehicle's position

is in relation to the solar harvesting strip **110**. In one exemplary embodiment illustrated in FIG. 15, a large sphere **1510** comprised of magnetic material is surrounded by several smaller spheres **1520** comprised of a dielectric material. The larger sphere **1510** may be attached to motorized or mechanical movements causing them to spin. In yet another exemplary embodiment, several large spheres may be used instead of a single large sphere. When the storage capacity of the vehicle is saturated, a super corona discharge may reintroduce charge to the solar harvesting strip **110**. Thus, a vehicle **1200** coated with a solar energy harvesting material, sitting in the sun will collect a charge up to its storage capacity. The excess charge will be discharged to the solar energy harvesting strip **110**. Furthermore, electrical current will be introduced across the surface of the small inductance spheres when the large sphere **1510** is spun. The net effect on the small dielectric spheres **1520** will be to cause a predominate charge on the faces that will discharge into the solar energy harvesting strip **110**, causing a point of charge accumulation that will increase the overall electric charge on the conducting layer **130**. This in turn will increase the overall magnetic field of the solar energy harvesting strip **110** that is available for charging. This arrangement provides a means for vehicle charge sharing. For example, a vehicle sitting in a traffic jam with a full charge may increase the magnetic field available for the motorist in front or behind him who may not have a full charge.

[0122] The spheres will preferably be constructed as part of a permanent chassis of the vehicle **1200**. The chassis will be formed like a parallel plate discharge capacitor with positive **1530** and negative **1540** plates and a dielectric or electrolyte material **1550** in between. Positive plate **1530** and negative plate **1540** are connected to the primary storage batteries **1450** as well as capacitors in the body panels **1230**. Additionally, any backup or ancillary electrical generation devices could be electrically coupled to the chassis for providing electrical charge to the chassis. For example, an electrical generating tire **1560**, discussed below, could be electrically coupled to the chassis. In an exemplary embodiment of the chassis, the chassis is a carbon fiber filament enclosure surrounding the negative plate **1540**. As the spheres **1510** and **1520** accumulate charge, the positive charges will be attracted to the negative plate **1540**, and the negative charges will flow to the positive plate **1530**. Excess charges will accumulate across the dielectric material and migrate to the negative electrode of the battery **1430** creating a current. When all the storage systems reach saturation, the current will flow to ground, in this case, the solar harvesting strip **110**.

[0123] Preferably, the entire body of the vehicle **1200** is constructed to capture, convert and use thermal and photonic energy to either charge the vehicle **1200** or add charge to the solar harvesting strip **110**. Therefore, when the vehicle is parked over a solar harvesting strip **110**, the parked vehicle is adding charge to the solar harvesting strip **110**. The body panels will be described with reference to FIGS. 16 and 17. The chassis and the body panels are first constructed of a carbon fiber sheet **1700**, followed by a honeycomb structure **1710** and then topped off by a carbon fiber sheet **1720**. The honeycomb structure **1710** may be filled with an electrolyte suspended in a polymer creating a gel type rechargeable battery or may contain a dielectric material. This composition creates a thin, lightweight structure that is much stron-